

Parasound HCA-2200II Power Amplifier

Audio Upgrade Modification

Driver Board (B1420): 2SJ75/2SK240 > Use 2SJ74BL & 2SK170BL

Remove C102 (C202), C103 (C203), C117 (C217), C118 (C218), C122 (C222), C123 (C223), C125 (C225).
C104 (C204), C105 (C205) = 100uF/25V Nichicon Muse KZ electrolytic
C108 (C208), C109 (C209) = 47uF/100V Nichicon Muse KZ electrolytic
C117 (C217), C123 (C223) = .1uF/250V WIMA MKP10 polypropylene film (REL RELCap RT *optional*)
C119 (C219) = 220uF/25V Panasonic SU BP
C120 (C220) = 100uF/25V Panasonic FC electrolytic

*** **White dots on boards indicate capacitor positive (+)** ***

R122 (R222) = 2.21k, 1/4W, 1% PRP PR9372 metal film
R125 (R225) = 47k, 1/2W, 1% Holco H4 metal film (feedback - *should be present*)

*** **Inspect the following and install eyelets if necessary** ***

R108 (R208), R109 (R209) = 3.9k, 2W, 5% Yageo RSF metal oxide
R138 (R238), R145 (No R245) = 8.2k, 2W, 5% Yageo RSF metal oxide
R143 (R243) = 1k, 2W, 5% Yageo RSF metal oxide
R144 (R244) = 5.6k, 2W, 5% Yageo RSF metal oxide

Output Stage B1210L,R): L: 1=red (front), 2=blue (orange), 3=white; R: 1=white (front), 2=orange (blue), 3=red

C301 (C401) = .1uF/250V WIMA MKP10 polypropylene film
C302 (C402) = 10uF/100V Panasonic UVP BP (+) to R311 (R411)
C304 (C404), C305 (C405) = 47uF/100V Panasonic FC electrolytic

Driver Power Supply (B1421L,R):

Remove C510~C529 (C610~C629).
C501 (C601), C502 (C602) = 2200uF/100V Nichicon KW electrolytic
C503 (C603), C505 (C605) = 220uF/100V Panasonic FC electrolytic
C504 (C604), C506 (C606) = 47uF/100V Nichicon Muse KZ or Panasonic FC electrolytic
C507 (C607) = .1uF/500V Kemet C330C104KCR5TA monolithic ceramic
C528 (C628), C529 (C629) = .1uF/250V WIMA MKP10 polypropylene film
[REL RELCap RT *optional* in C522 (C622), C527 (C627) locations].

Install 5.6k, 2W, 5% Yageo RSF metal oxide resistors in C511 (C611) and C517 (C617) locations.
Install (4) .1uF/500V Kemet C330C104KCR5TA monolithic ceramic across bridge rectifiers D501, D601.

Main Power Supply:

Replace BR525 bridge rectifiers (x2) with Diotec FDB3506P/T-S soft recovery type.
Main Filter Capacitors = 22,000uF/80V United Chemi-Con ESME800LGC223MCA0M (50X100mm). Place 1/4" foam underneath for proper height.

Install .1uF/850V Roederstein MKP1839HQ across T1, T2 secondaries (*optional*).
Install .1uF/275V Evox Rifa PHE840 Class X2 EMI suppression capacitor across AC power input IEC socket (*optional*).

Alignment:

TVR301, TVR401 (bias) = 20mV DC across R316 (R416) or any of the .22Ω emitter resistors *with top cover on*.